

**IN THE DRAWINGS**

Please change "FUG. 2" to --FIG. 2--.

Applicants hereby submit Annotated Sheets and Replacement Sheets of the drawings for FIG. 2 through FIG. 2E to correct a typographical error in FIG. 2.

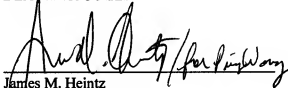
### REMARKS

In light of the telephone conversation with the undersigned on September 29, 2006, in which Examiner Whiteman indicated a correction to Figure 2 to correct a typographical error is required, Applicants hereby submit six (6) annotated sheets of drawings and six (6) replacement sheets of drawings (Figs. 2 through 2E). The first page of annotated sheet shows the replacement of "FUG. 2" with --FIG. 2--.

Applicants submit that this application is now in condition for allowance and therefore request favorable consideration. If any issues remain which the Examiner feels may be best resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact Applicants counsel, Ping Wang, M.D. at 202.861.3993.

Respectfully submitted,

DLA PIPER US LLP

A handwritten signature in black ink, appearing to read "James M. Heintz", is written over a horizontal line.

James M. Heintz  
Registration No. 41,828

Ping Wang  
Registration No. 48,328

1200 Nineteenth Street, N.W.  
Washington, D.C. 20036-2412  
Telephone No. 202.861.3900  
Facsimile No. 202.223.2085

## SEQ ID NO:1 pShuttle Sequence

CATCATCAATAATATACCTTATTTTGGATTGAAGCCAATATGATAATGAGGGGGTGGAGTTTGTGACG  
 TGGCGCGGGCGTGGGAAACGGGGGCGGTGACGTAGTAGTGTGGCGGAAGTGTGATGTTGCAAGTGTG  
 GCGGAACACATGTAAGCGACGGAATGTGGCAAAAGTGACGTTTTTGGGTGTGCCCGGTGTACACAGGA  
 AGTGACAAATTTTCGCGCGGTTTTAGGCGGATGTTGTAGTAAATTTGGGCGTAACCGAGTAAGATTGG  
 CCATTTTCGCGGGAACCTGAATAAGAGGAAGTGAAATCTGAATAATTTTGTGTTACTCATAGCGCGT  
 AATACTGGTACCGCGGCCGCTCGAGTCTAGAAGTGTGGATCCCCCGGGCTGCAGGAATTCCTGATGG  
 CTCTCAAAATTCCTGCCTCCTTTAGGGATAAAAGACTTTAAGACTTTTAAACAAAAAAGAAAAAGAA  
 AAAAAATTCCTGCCTCCTGGTGTACACACAGAAAGGTTCCCTCCCTTGAATGTGACCAGGATCT  
 GTGAAAAATAACGGGATAGCGCTCCTGTGATTAGGTTATGTGGTAGACTAGAGCAAGATTCTCCTGCT  
 GGTTTTGAAGAAAGTCAGCTGCCATGTTGTGAGACTGTCATGGGCTAGGGCATGAGCCCTTTAAATATCT  
 GGGAGCAACCCCTGGCCAGCAGCCAGTGAGAAAAACGGGCCCTCAGTCTACAATCACAAGGAACATA  
 ATTCTGCCAACAACTGAAGGAACCTTTGAAGAGGATCATGATCCCTTGATTGAGCTTGATGATATATC  
 TGAGCAGAGGATACAGCTAACTTGTAAGGGAAGTATAAAAAACATGCATGGGAATGATATATATC  
 AACTTTAAGGATAATTGTCTACTTCTGGGAATGAAGGAAAGAAATGGGGCTTTAGTTGTATTATGA  
 TCTTTAATTTCTCAAAAAAATAAGATCAGAAAGCAATATGGCAAAATGTTAATACTTTTGTGGGTAC  
 GTAGGTATTCAGCATACCCCTTTTCTGAGTTCAAAATATTTTATAATTAATAATGAAATGCAGGCCAGG  
 CACAGTGGCTCATGCCTATAATACCAGCACTTTCGAGGCCGAGGTGGGAGGATGGCTTGAGGCCAGA  
 CCAGCCTGGCCAACATGGCAAAACCCCATCTCTACTTAAAAAATAAATATATATATATATATATGT  
 GTGTGTGTGTAT  
 TTATATATGTGTGTAT  
 CACACACAATTAGCCAGGCATGGTGGCGCACACCTGTAGTCCAGCTACTTGGGAGGCTGAGACATGA  
 GAATTGCTTGAACCTGGGAGGCAGAGTAGTTAGTGAGCTGAGATCATACCACTGACATCCAGCCTGCT  
 GACAGAGTGAGACTCTGTCTTAAAAAATAAAAAATTAATAATGCAAAAGGTCCAAGTGAATT  
 GAAGAGGAAAGGGGTATCAAGGAAGGTTTTTGTGGAGGTGACGTTTGTAGCTGGGTCTTAAATGACTTA  
 AACATGGGATAAGAAAGGGAGGGAATAAGGACATTTTCAGGTACGAGAAATAAGGAGCATCAGTGGAA  
 ACAACCTAACGCTCTGCAACCAAGTGAATGGATAACAAAAATGTAATTCAGATGGTATCCAACCTACGA  
 TGGTTCCAACATGAGATTTTCTGACTTTAGGATAGATTATCAAAAGTAGTAAATCCATTTTCAACTTA  
 TGATATTTTCAACTTCAGATGGGTTTATCAGGACACAGTTGAGGAACACCTGTCTATCCATACAATTG  
 GCAATAAAAAAGGAAATGAGTGCAGATATACCTCACAACATGAATGAACCTTGAAACATTAAAGTGAG  
 AGAAGCCAGATACAAAAGGCCACATATTGTATGATTCTAATATACAAAATGTCCAGAATAGGCAAAAT  
 CTTATAGACAGCAAGTAGGTAGATGATCAGTTTGCTAGGTGCTGGGGGAAGGGAAATGGGGAGTGA  
 TGGCTAAGGGGATGGGTTTCTTTGTGGGAAATGAAATGTTTTTAAATTTGAGCGTGATAATGATTG  
 CTCAATGCTGCATATATATATATATATATATATATATATAAAGAGAGGCTGTAGACAGTGATA  
 AGTGATATATATATATATATATATATAGAGAGAGAGAGAGAGAGAGAGAGAGGCTGTTAGTGATAAGTG  
 ATCAGGAAAAATAAAGTATTGAGGAGGAATACGAAGTTGACCGTGTGAAAAACATGAGATTTTATATA

GGATGGCCAGGGAAGCCCTTAATGAGAAAGTGACTTATGAGTAAAAACAAGGATCCTAAACCTTAG  
CATGCATCAGAATCACTCGGAAACTTGTTAAAGCATAGCTTGCTGGGCTCATCACAGATATTTTGATT  
CGGTAGGTTCTTGCTGATATTAATACTTTTGGTCTAGGGAACCACTTTTGAGAACCTAGAGCTAAA  
GGAAGTAAAGGTTTCCCTTAGTGTACTAGCTGGTAACCTAGGAACTGCTTAGCCTCTCGGTGCTAAG  
ATACAAAATACTTTAGCACATAATAACACATGGAAAATAGTCTATAAATTATAAATATTATTTTATG  
TACCAATATTACATAAGACAAAATCTAAGCAAGATATATATATATACATAAAAATATAAGATATAT  
ATGTATATATTATATAGATAAATAGAGAGAGAGATTATGTTTGAAGAAAACTTCAAACTAA  
AAAAAGAGAGGTAGGAAGTATACCATTTAATTTGGTAAAAACAATTACTAAGTAGTCTTTACAAA  
AAACCAATCTCACTCCTTTAGAACACAAGCCCACTTAAACTGATGCAGAGGAATTTCTCTCCCTG  
GCTTACCTTTAGGATGGTGCATACTAAGTTAGAAAAAGTCATAAATGTATATTTAAAGTAAATGTGAA  
CTTACTTCCACAATCAAGACATTCTAGAAGAAAAAGAGAAATGAAATCAGTACAATGAATAAAAG  
GTATTTCCAATTATAAGTCAAATCACATCATAACAACCTAAGGAATTATCCAACTCTTGTTTITAGA  
TGCTTTATTATATCAAACTCTCCTTTAAACAAGTGGCCCATCTGCTGGGATTGGGAAGCTGTAATACT  
GAAATTTTATCATAATGGAAATTTTAAAAACAGAAATTTGACCCACCTGTTTTTAAACACTTTCATTA  
CTTAACAAGAGGTCTAATCTTGGGCAAGTCTTGAAATTTCTCTGGCCTTAGTTCCTCATGTGTTAAATG  
AACTTGGAAGCAGTTGGTCTCTTATAGTCTCTGACTCTAACATTTCTAAGAATTATTTGTACAATAA  
CTCAAAAATCACATAAATTTAATTTACCATATGGACTCCAAAATATATTTCTCATTAGGCTAAACCTGA  
TCTGCATTTTCTGGATGTGTCCATATTTCTGGACTACACTAAAAATGATACCAATGCTTCTCTCACC  
ATAAACCTCACTTCGCTTTCTACATTTAAGAATTTTATAGCTGGAAGAGTCCCTAACAGAAAATACCA  
TCTAATAATTACCCCTCAAAAATCGAGAAAGTCTTATCTGTCTTATGCTAGTTATAAGAATGAGGCAGC  
ATTTACATAAATGGTTATAAACTGCCACAAGAAGATTCATGATGTGTGTTTATCTGTAGCTCTCAT  
CATACTCTGTCATATAACTATAGCATTAAGATTTTAAATGTTCTATATATTTCTTAAGACAGTGTACC  
AGAGTAAGGCACAAAAGATCCACTGGTTTGCAAGAAAGATTAGAATTTTAAATTTTAAACCTCACC  
TTGTTTAATCTATATTTTGTATGTATTTTGTAAACATATATATTATTACCATAAATCATATATAATTT  
AAAAATGCATATATTAGGGTAAATGCTCAGGAACTTTTATAAATTTGGGCATGCAAAATACAAAGTTG  
AAGACTCACTGTGTTAGGTATTAAGTAAAGTTATAACCAAGTAAAGCTTCCACCTTTTCATGTCTCA  
AAGCAGTTTATTTGTTGGAGGTAAGATCTCTAGAAGCTTAAACAGGTCCAAGTACAGAATGAAGTAA  
GCTAGCCCATAACTTGTGGCAAGCAATTCATACTATTTCTCTCATGCTAGCTCTCTCAGTGAAGCAG  
CTACTATAGACAACCTGCAGCCTATTGGTAGCCTATTTACAGGCAGGAAAAAATTACTTTTATTTCA  
AAGTGAAGCTCAGGACATGGGGAGAAAATGAATACAAAAAATAGGGTCAATCCAAAGGCACACAGC  
AAATGAGTAACACAGTTATGTTTTTTCCCATTTGTATGAGGTCCAGTAAATCTAAGTAAACTGCAA  
ATTTAATAATACACTAAAAAGCCATGCAATTGTTCAAATGAATCCAGCATGGTACAAGGAGTACAG  
ACACTAGAGTCTAAAAACAAAAGAATGCCATTATTGAGTTTTGAATTATATCAAGTAGTTACATCT  
CTACTTAATAAATGAGAAAAACGAGGATAAGAGGCCATTTGATAAAATGAAATAGCCAAGAAAGTGG  
TATTAGAGACTTGAATACAGGATTTGGGTCCAAAGTTCATCTGCTCAAAATACTAAGTGGGAAAAAGA  
GGGAAAAATATTTATATACATATATCTGCACAAAAAATACCCCCAAAAGACAAAATGAGGCCAG  
GCAGGTGGCTCACACCCGTAATCCCGTACTTTGGGAGGCTGAGGCAGGTGGATACCTGAGATCAGG

FIG. 2A

AGTTGGAGATCAGCCTGGTCAACATGGTGAAACCCGTGCTCTACTAAAGATAAAAAAATTAGCCAGGC  
ATGGTGGCGGTGCGCCTGTAATCCAGCTACTTGGGAGTCTGAGGCAGGAGAATCACTTGAAGTGGGAA  
GGGGAGGTTGCAGTGAGCCAAGATCGTACTACTGCACTCCAGCCTGGGCAGCAGAGTGAGACTCCATC  
ACAAAAATAAATAAATAAATAAATAACAATGAAACAGAAAGTTCAAATAATCCATAATCTTACCAC  
CAAGAAATAACTTTCTACTCGTTATACCTTATTGATTTTTCCATAATAAATGTACTTTACTGTGACTATCAT  
GAAAAGAAAGTTATTTTAGAAACAGAGAACTGTTTCAGATCAAATCTATGTAGTAGAACAGAGCCATT  
AGGTGGGAAAGACGAGATCAAACTAAATCTCAGAAGGCCTAAAGGCTAGGTCCATTCCAGCACTAA  
AAACTGACCAGACAAGTAATGGCTTCAACAGCTTCTAAATATGGACAAAGCATGTGTAAAGGGAAGG  
ACAGGTCTAACAGTGGTATATGAAATGAACAGGAGGGGCAAGCTCATTTCTCCTCTGAAGTTTCCCA  
AAGATGCTGAGGAGGACATTAGTTTGACATGACCCTGATATGGGACAAGATAATTTACAGAAAGTTT  
ACATGTTAAAGTTTCTTATAGATACTCATTCAGTAAGCAATGAACACTAAAACTAAAGAAAGAAA  
AGAGCTTTAGAGTCAGGCTGTATTCAAATTCAGCTCTACCACTTACTGGTCTGTGACTTTGGGC  
GTCTTTTAAACCTTATTAAGTCTTAATTTCTGATTGTAAAAATGGGGATATCGTCTCCCTCACAGGATTG  
TGTGAAACTTTTATGAGATTAATGCCTTTATATTGGCATAGTGTAAGTAAACAATAACTGGCAGCTT  
CAAAAAAAAAAAGCAGTAGCATTCCATCATTTATTATGGTTACTCTCAAAAGTTTTCATGTACTA  
GAAGATAAATATTCAAATACCTTAATATCTCCATTATTTTCAGGTAAACAGCATGTCTCTGAACAACCA  
ATGGGTCAACAAATAAATTAAGGGGAAATCTAAAAACATCTTGATATTAAGTACATGGAAGCACA  
ATATACCAAAACCAATGGTTCACACTAGGAGAATTTTAAGGTACAAGAAAACCTTTTGAGATTCTTA  
AAATAATAGTATGTCTGAATTTATGTAGTGATTACAGAACTGTGTGAAGAGCTCTACTTGCATTAT  
AGCACTTAATCTCTTAACCTCTATGGCTGTATTTATCAACCTCAOCCATAATCCATATGGAACACAGAG  
AGGTTAAGTAACTTGCCCAAGGTTCAGAGTTAGGAAGTACTAAGCCATGTCTTGAATCAAGTTGTCAGGC  
TCGGAACTCACACTTTCAGCCACTACATAAATACTGCTTTGCTATCTTTTAGGAAACTATGTGAGTCTA  
CCTCACATAGACTCACATAGGTTTGTTTTTTTTTTTTTTTAAAGGCTATCTTTTCCCCATCAATGTTTT  
TTGAAGGATOCCAAATTAGAGTCCACAGAGGCAGACAGCAGTACTTGACAATATGGACATTTAAGGT  
TAATGTTGGATTCTACTGTCTTTTACTACATGACCTAGGGAACGATAATTAACTAGACTGCTTCCAA  
GGGTAAATAAACCATTAAGTTATACTATGTAAATATCTCTTAGTGATTGATTGAAAGCACACTGTTA  
CTAATTGACTCGGTATGAAGTGCTTTTCTTCTCCCTTCAAGATACATACCTTTCAGTTAAAGTTGA  
GAGATCATCTOCCAACTAATCTTTATGTCCCTGTGTGACTGGTCATTCTAGTTAAAAAATAAAGTCTA  
ATATATATATATATCTACACACACATATGTATATGTATATCTGTACACACACAACCTTCAAATTA  
AATGAGAACTAGAAGATTGAGAAGTTAGCTAGCTAATATCCATAGCATTATGATATTCATAAGTATA  
TGAATATAAGAATTAGGTTCTCTGAAATGAATGACTAGAAAATCTTCAAGTAGAGATTAGTAAAAAT  
TAAAAAGTCTTAATCGGCCATTACTGATTTGATGTTTTTAAGAGTCTAAAAAATGGGTTACATCCATT  
TTTAAGTGGGTAGTATTATAACAGCCACCCATCTTCAATCACAGTGATTTCTGAATTGTGAGGGGAAGTT  
ATTAGCATGACAGGTGTCTGGTTCTGGCCCTGTACGATTCCCATGAGTCAAGCAAATTGTAAGGGCTG  
GTCTATATCACACCAACCCCAAGGATATGTCCCTCAAAAGTCTAGCCCAGGCCCGTCATCTTCAGC  
ATCATCTGGGAAACAGGCTGTATTAGTAGTCCCTTAAGGAATACCTCTTAGGCTCCCATTTTACTGCT  
ATCACAGAATCCAATAAAACCTTACAGGAGATTCAATGGGAAATGCTCAACACCCACTGTAGTTGGT

GGTGACAATGACCATAAATTGGCTGTGCTGGATTTCAGGACAGAAAAATTGGGTGAAAGAGCAGGTGA  
 ACAAAGAGCTTCGACTTGCCTAGCAGAGCAAGCCATACCATACCACAAAGCCACAGCAATTAC  
 AACGGTGCAGTACCAGCACAGTAAATGAACAAAGTAGAGCCCAAGAAACAGACCCAGAACTATATGAG  
 GATTTAGTATACAATAAAGATGGTATTTTCGAGTCAGTAGGAAAAAGATGAATTATTCAATAAATGATG  
 TTTGGCCAACTAGTAACCCATTTCGGAAAAAATAAAGTATGGTCCCTACCTCAGCATACACAAAA  
 ATAAATTCAGACGGATTAAATCTAAATGTAAAAATAAAGCCATAAGTGGACTGGAAGAAAAATAG  
 AGAATTTTTTTTAACTCCGTAGAAAGGGTAAAAAACCAGGCATGACATGAACAAAACCTGAAGAGG  
 TTCTGTAAACAAATACCCCTTTTATATATTGGGCTCCAACAATAAGAACCCATAGGAAAAATGGAGAAT  
 GAACACAAATAGACAATTTATAGAAGAGAAGGTTATAAGGTGTAAAAATTATATCTATCTGAGAAACA  
 AACACTAAAACAATGTGATTCTACTGTCTCCCACCCATACTGGCAAAACCTTAAGCCTGATAATATGCT  
 GAGGGGAAATAAGCACTCTTGTGGTGAGAGTATTAATGGCATAGCTTCTTTTGAAAATGACATAGC  
 AATACCTGTTAAAAATTGCAACATGCATGTCTCACTTAATTCATGTAAATCCCATCTTCGGGAATCAATT  
 GCTACAAAAACACTTGACAAGTATACAAAGATACATTCAAGAGTGTTCACTGGGCCGGTGGG  
 TTCATGCCTGTAATCCAGGGAGGCAGAGGCAAGACGATCGCTTGACCCAGGAGTTCAAGGCCAGCC  
 CGAGAAACACAGCAAGACCTGTCTCTCTTTTTTTATTTAAAAATAAATGTTCACTGTATCAGTTGT  
 TCACAAAAACAAACCAACATGTCCATTAAACAGGGAACCATTTAAATTAATCAAGTTCATCTACACAAT  
 GTAATACCATGCAACTATTAAAAAGCACCTGATAATCCAAAGCACACTGAGACAGAATAATGCTATTA  
 AAAACACCAAGTAGTGGAACACTGTGTTGCCTATGACACCATTTTTATTCAACATTTAAACAAATTGT  
 AACAGCAATACATGAGTAGTGACAATGGCGTTTATGAGACTTTTCACTTTTATGTGCTTCTATTTTTGT  
 TATGCTTCTATATATACATCCATTATTATTATGGAGTGTTACTTTCAAAAATCACAAATGGGCCAGTATTA  
 TTTGGTGTGCAAGGTGAGCATATGACTTCTGATATCAACCTTTGCATATTACTTCTCAATTTAGGGAA  
 ATTACAGACATCCCTTATTCTAACTTAAACCCAGCATTTCAACATACAGAATTGATGGGGAA  
 AAAAAAGAAAGAAGAAAGAAAGAAAGGCAACAAGCTTCAGATGACAGTGACTCACATCAAATTATT  
 TATAAAATCTGTTAAATAGTGCCATCTCTGGAGATACCTGGTATTACAGTCCAACCTCCAGTTGATGTC  
 TTACAGAGACAAGAGGAATAAAGGAAAAAATATTCAAGAACTGAAAAGTATGGAGTCATGGAAAAA  
 TTGCTGTGATCCAAAGGCTACGGTGATAGGACAAGAAACAAGAGAACTCCAAGCAGTAAGACACTGC  
 TGTCTATTAGCATCCAAACCTCCATACCTCCTGTTTGGCCCAAGGCTTTTTTAAAAAATAGAGACAGG  
 ATCTCACTATTTTGCTCAGGCTGGTCTTGAACCTCTGGACTCAAGCTATCCTCCTCGCCTCGGCTCCTAA  
 AGTGCCGAGATTACAGCCTTGAGTCACCATACCTGGCTATTTATTTTTTCTTAACTCTCTTGCTGGCCT  
 ATAGCCACCATGGAAGCTAATAAAGAAATTTAATTAAGAGTAATGGTATAGTCTCACTACATTTGGAAT  
 ACAGGTATAAGTGCTACATTGTACATGAATGGCATACATGGATAAATACCCCACTGGGTGGCCAA  
 AGGAAGTGCAGAACCTCCCTCCTTGCTGTCTGGAACAAGCTTCCCACTAGATCCCTTTACTGAGTGC  
 CTCCTCATCTTTAATTATGGTTAAGTCTAGGATAACAGGACTGGCAAGGTGAGGGGAAAGCTTCTCT  
 CCAGAGTGTCTACCTCTCTCTTACCGTCTATCTCTCACTCTCTCAGCCAAGGAGTCCAATCTGT  
 CCTGAACTCAGAGCGTCACTGTCAACTACATCAAAATTGCCAGAGAAGCTCTTTGGGACTACAAACAC  
 ATACCTTAAATGTCTTTATTTCTATTTTGTCTACCTCTTCAGTCTAGGTGAAAAAATAGGAAGGATAAT  
 AGGGAAGAACTTGTTTATGCCTACTTATCCGCCCTAGGAATTTTGAAACCTCTAGGTAGCAATAA

GAACTGCAGCATGGTATAGAAAAAGAGGAGGAAAGCTGTATAGAAATGCATAATAAATGGGCAGGA  
AAAGAAGCTGCTTGGAAACAAACAGGGAGGTTGAACTATAAGGAGAGAAAAGCAGAGAGGCTAATCAAC  
AAGGCTGGGTTCCCAAGAGGGCATGATGAGACTATTACTAAGGTAGGAATTACTAAGGGCTCCATGTC  
CCCTTAGTGGCTTAGTACTATGTAGCTTGTCTTCTGCAGTGAACTTCAGACCCCTTCTTTAGGATCCTAG  
AATGGACTTTTTTTTTTATCGGAAAAACAGTCATTCTCTCAACATTCAAGCAGGCCCAAGTCTACCAC  
ACTCAATCACATTTTCTCTTCATATCATAATCTCTCAACCATCTCTCTGCTCTTTAACTGTTTTCTATAC  
CCTGATCAAATGGCAACAAAAAGTGAGAATGTTAGAAATCATGTATTTTAGAGGTAGAGCTGTATCTCA  
GATAAAAAAAGGGGCAGATATTCATTTTCCAAAAATATGTATGCAGAAAAAATAAGTATGAAAGG  
ACATATGCTCAGGTAACAAGTTAATTTGTTTACTTGTATTTTATGAATTCCTTAAAAACCTACGTCAACC  
GCCCGTTCCACGCGCCCGCGCACAAACTCCACCCCTCATTATCATAATTGGCTTCAATCCAA  
AATAAGGTATATTATTGATGATGTTAATTAACATGCATGGATCCATATGCGGTGTAATACGCGACA  
GATGCGTAAGGAGAAAAATCCGCATCAGGGCGCTCTTCCGCTTCTCGCTCACTGACTCGCTGCGCTCG  
GTCGTTCCGCTGCGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGG  
GGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCGC  
GTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCAGAAAAATCGACGCTCAAGTCAGA  
GGTGCGGAAACCCGACAGGACTATAAGATACAGGCGTTTCCCTCGGAAGCTCCCTCGTGOGCTCT  
CCTGTTCCGACCTGCGGCTTACCGGATACCTGTCCGCTTCTTCCCTTCGGGAAGCGTGGCGCTTCTCT  
ATAGCTCAGCTGTAGGTATCTCAGTTTCGGTGTAGGTGTTTCGCTCCAAGCTGGGCTGTGTGCACGAAC  
CCCCGTTACGCGCGACGCTGCGGCTTATCCGGTAACTATCGTCTTGAAGTCCAACCCGGTAAGACACG  
ACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGATGTAGGCGGTGTACAC  
GAGTTCCTGAAGTGGTGGCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTGTCT  
GAAGCCAGTTACCTTCGGAAGAGATTGGTAGCTCTTGATCCGGCAACAAACCAACCGCTGGTAGCG  
GTGGTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATC  
TTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACTCAGGTTAAGGGATTTTGGTCATGAGATTATC  
AAAAAGGATCTTACCTAGATCCTTTTAAATTAATAAATGAAGTTTAAATCAATCTAAAGTATATATG  
AGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTT  
GTTATCCATAGTTGCTGACTCCCGTCTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCC  
CCAGTGTGCAATGATACCGCGAGACCCACGCTCACCGGCTCCAGATTATCAGCAATAAACACAGCCA  
GCCGGAAGGGCGAGCGCAGAAAGTGGTCTGCAACTTTATCCGCTCCATCCAGTCTAATTAATTGTTG  
CCGGAAGCTAGAGTAAGTAGTTTCGCCAGTTAATAGTTTGCACACGTTGTTGCAATGCTCGACGCCA  
TGAGATTATCAAAAAGGATCTTCACTAGATCCTTTTCAAGTAGAAAGCCAGTCCGACAGAAACGGTGC  
TGACCCCGGATGAATGTCAGTACTGGGCTATCTGGACAAGGAAAAACGCAAGCGCAAGAGAAAGC  
AGGTAGCTTGCAGTGGGCTTACATGGCGATAGCTAGACTGGCGGTTTTATGGACAGCAAGCGAACCG  
GAATTGCCAGCTGGGGCGCCCTCTGGTAAGGTTGGGAAGCCCTGCAAGTAACTCGGATGGCTTCTT  
GCCGCAAGGATCTGATGGCGCAGGGATCAAGCTCTGATCAAGAGACAGGATGAGGATCGTTTCGC  
ATGATTGAACCAAGATGGATTGACGCGAGGTTCTCCGGCCGCTTGGGTGGAGAGGCTATTCGGCTATGA  
CTGGGCACAACAGACAATCGGCTGCTCTGATGCCGCGTGTTCGGCTGTGACGCGAGGGCGCCCGG

TTC TTTT TGTCAAGACCGACCTGTCCGGTGCCCTGAATGAACTGCAAGACGAGGCAGCGCGGCTATCG  
TGGCTGGCCACGACGGGCGTTCTTGCGCAGCTGTGCTCGACGTTGTCACTGAAGCGGGAAGGGACTG  
GCTGCTATTGGGCGAAGTGCCGGGGCAGGATCTCCTGTCTCATCTCACTTGTCTCCTGCCGAGAAAAGTAT  
CCATCATGGCTGATGCAATGCGGCGGCTGCATACGCTTGATCCGGCTACCTGCCCATTCGACCAACAA  
GCGAAACATCGCATCGAGCGAGCACGTACTCGGATGGAAGCCGGTCTTGTCGATCAGGATGATCTGGA  
CGAAGAGCATCAGGGGCTCGCGCCAGCCGAACTGTTGCCAGGCTCAAGGCGAGCATGCCCGACGGC  
GAGGATCTGCTGCTGACCCATGGCGATGCCCTGCTTGCCGAATATCATGGTGGAATAATGGCCGCTTTTCT  
GGATTATCGACTGTGGCCGGCTGGGTGTGGCGGACCGCTATCAGGACATAGCGTTGGCTACCCGTGA  
TATTGCTGAAGAGCTTGCGGCGAATGGGCTGACCGCTTCTCCTGCTGCTTACGGTATCGCCGCTCCCGA  
TTCGACGCGCATCGCCTTCTATCGCCTTCTTGACGAGTTCTTCTGAATTTTGTAAAAATTTTGTAAAT  
CAGCTCATTTTTTAAACCAATAGGCCGAAATCGGCAAAATCCCTATAAATCAAAAAGATAGACCGAGA  
TAGGGTTGAGTGTGTTCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAA  
GGGCGAAAAACCGTCTATCAGGGCGATGGCCACTACGTGAACCATCACCTAATCAAGTTTTTGGG  
GTGAGGTGCCGTAAAGCACTAAATCGGAACCCCTAAAGGGAGCCCCGATTTAGAGCTTGACGGGGA  
AAGCCGGCGAACGTGGCGAGAAAGGAAGGAAGAAAGCGAAAGGAGCGGGCGCTAGGGCGCTGGCA  
AGTGTAGCGGTACGCTGCGCGTAACCAACACACCCGCGCGCTAATGCGCCGCTACAGGGCGCGTC  
CATTCGCCATTACAGGATCGAATTAATTCTTAATTAA